Atty Doc No. 080-06

Extrusion Process for the Prepartion of Toughness-Modified and Layered Silicate-Reinforced Thermoplastic Systems

Abstract of the Disclosure

This invention relates to and extrusion method for the production of strength-modified and phyllosilicate-reinforced thermoplastic systems. According to the invention, a production method for nanocomposite materials, using the most economic raw materials, which may be easily worked and which do not require a complicate prepartion before processing and with establishment of a starting material composition which meets the requirements for a high-performance nanocomposite material, in particular, with regard to rigidity and strength, may be achieved, whereby a strength modifier in the form of a phyllosilicate is added to the compounded system as an essentially aqueous dispersion and the water is at least partly removed from the compounded system during the extrusion.